## **LETTERS**

## SHARP-SHINNED HAWK PREDATION OF A MALE AMERICAN KESTREL

At 12:10 H on 8 May 1986, I observed from my vehicle a hunting male American Kestrel (Falco sparverius) in the Northwest Angle Provincial Forest of southeastern Manitoba, Canada. The kestrel was hunting from electrical power lines about 11 m above a 12 m-wide grassy right-of-way, parallel to a paved provincial highway. Southeast of the right-of-way was a dense mixed balsam fir (Abies balsamea) and black spruce (Picea mariana) forest interspersed with trembling aspen (Populus tremuloides).

The kestrel made four diving flights into the grass, returning immediately up to the wire where it had previously perched. At 12:30 H, as the kestrel flew toward the grass below, it was intercepted in mid-flight by another bird. The kestrel and its attacker grappled about 3–5 sec and then separated. After flying about 2 m toward the forest, the kestrel was overtaken by the attacking bird. The two equal-sized birds then tumbled together to the ground. The attacking bird, identified as a Sharp-shinned Hawk (*Accipiter striatus*), was on top of the kestrel. The sharp-shin's red eye and reddish-brown barred breast and abdomen indicated it was an adult (W.E. Godfrey 1986, The birds of Canada. National Museums of Canada, Ottawa, Canada). Furthermore, the sharp-shin was likely a male, as it did not appear much larger than the male kestrel (Godfrey 1986).

The kestrel was pinned down belly-up and faced the Sharp-shinned Hawk; the kestrel's wings flapped slowly on either side of the mantling Sharp-shinned Hawk. I did not observe the sharp-shin biting the kestrel. After 1.5 min the kestrel ceased flapping its wings. Soon thereafter, the sharp-shin flew into the forest carrying the limp carcass of the kestrel in its feet. A quick search of the immediate surroundings failed to locate a nest or plucking perch.

Agonistic encounters between American Kestrels and Sharp-shinned Hawks have been described previously, but I am not aware of reports of actual mortality resulting from these encounters. Early one August morning, C.W. Nash (in E.E. Thompson 1975, The birds of Manitoba. Premium Ventures Ltd., Winnipeg, MB, Canada) observed five or six kestrels and a Sharp-shinned Hawk chase each other "for over half an hour and (I) left them still at it." This suggests that the element of surprise is important to successful predation on kestrels by Sharp-shinned Hawks. However, W.E. Cram (in A.C. Bent, 1961, Life histories of North American birds of prey. Part 2. Dover Publications, Inc., New York) observed an aerial encounter between a female Sharp-shinned Hawk and an American Kestrel in which the former appeared to "have the advantage." The outcome of this "vigorous and spirited fight" was not recorded (Bent 1961).

D. Klem et al. (1985, Wilson Bull. 97:230-231) summarized observations and literature on the interspecific killing by raptors. Major motivational factors include self-defense, vulnerability and conspicuousness, annoyance, food, and defense of territory, nests or young. It is perhaps noteworthy that raptor species that regularly take avian prey are predisposed, both anatomically and behaviorally, to killing other raptors. Therefore, one would expect Peregrine Falcons (Falco peregrinus), Merlins (F. columbarius) and the accipiters to kill other raptors more frequently than do other raptors that typically feed on non-avian prey, such as buteos. Nine of 10 cases of raptors killing and chasing raptors reported by Klem et al. (1985) involved Peregrines, Merlins, and Sharp-shinned Hawks as the predators or aggressors. There are two records of the European Kestrel (F. tinnunculus) appearing in the diet of the European Sparrowhawk (A. nisus), but no observational details are given (Uttendörfer 1952 in I. Newton 1979, Population ecology of raptors. Buteo Books, Vermillion, SD).

While it is likely that a combination of motivational factors (listed above) often play a role in the interspecific killing of raptors, the observed killing of an American Kestrel by a Sharp-shinned Hawk may simply have been predation for food by a bird specialist. The early date may eliminate defense of a nest as a causal factor for the attack (C.J. Henny et al., 1985. J. Field Ornithol. 56:97–112). While the American Kestrel is probably not normal prey, the Sharp-shinned Hawk may have responded to the seeming vulnerability of the hunting kestrel intent on catching its own food.

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